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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,935	11/20/2003	Robert M. Reisel	71024-461	3168
27305	7590	03/15/2006	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			JIMENEZ, MARC QUEMUEL	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E

Office Action Summary

Application No.

10/718,935

Applicant(s)

REISEL ET AL.

Examiner

Marc Jimenez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2-20-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: in the first line of the specification, - - now patent number 6,682,079 - - should be entered after “2002”.

Appropriate correction is required.

Claim Objections

2. **Claims 2-4** are objected to because of the following informalities: claims 2-4 depend upon claim 10, however, there are only 4 claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-4** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “the plate” in line 6 which lacks proper antecedent basis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Backlin (US4369980) in view of Olson (US3279235).

Backlin teaches a method of manufacturing a gasket assembly comprising: forming an annular grommet **11** having a generally U-shaped cross-section defining a pair of axially spaced legs **24,25** having outer axially opposite sealing surfaces spaced a predetermined distance apart when in an underformed state corresponding to an initial thickness of the grommet **11** which is greater than the thickness of the plate **8**, installing the grommet **11** in the opening of the plate **8**, wherein the grommet is fabricated of a “heat-treatable” ferrous-based metal material and is formed to the annular, U-shaped cross-sectional configuration when the grommet material is in a relatively soft, plastically deformable pre-heated condition. It is noted that the grommet legs can be compressed elastically under an axial compression load to a reduced thickness corresponding substantially to the thickness of the plate **8** and to return to the initial thickness upon removal of the compressive load. At col. 2, lines 33-35, the U-shaped grommet **11** is pressed against the surfaces **24** and **25** of the gasket body **16**. Therefore, before, the grommet is

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pressed, it is considered to have an initial thickness greater than the thickness of the plate. After the grommet is “pressed against the surfaces of the gasket body”, it is considered to meet the limitation compressed elastically to a reduced thickness corresponding “substantially” to the thickness of the plate. Alternatively, in figure 4, the grommet 11 has an initial thickness which is greater than the thickness of the plate (the thickness bounded by reference numerals 24 and 25). The grommet 11 is then compressed axially (col. 2, lines 35-40) by rotation of head bolts 7. Therefore, the compression of the grommet 11 is compressed elastically under an axial compression load to a reduced thickness corresponding “substantially” (the limitation “substantially” does not mean that the thickness has to be exactly the thickness of the plate, therefore, the deformation of the grommet 11 is considered to meet this limitation) to the thickness of the plate (the thickness bounded by reference numerals 24 and 25) and to return to the initial thickness upon removal of the compressive load (the grommet is made of metal and therefore will elastically be compressed).

Backlin teaches the invention cited above with the exception of subjecting the grommet to a heat treatment to impart elasticity and strength properties to the grommet in addition to the plastically deforming of the grommet.

Olson teaches forming a metal grommet including the steps of plastically deforming (figures 5-14a) and then subjecting the plastically deformed grommet to a heat treating step in order to impart increased hardness to the metal and increased memory to the fastening legs.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Backlin with plastically deforming and then subjecting the plastically deformed grommet to a heat treating step, in light of the teachings of

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Olson, in order to impart increased hardness to the metal and increased memory to the fastening legs.

7. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Backlin in view of Olson as applied to claim 1 above, and further in view of Canner (US6048418).

Backlin/Olson teach the invention cited with the exception of the heat treatment step having an austemper heat treat cycle.

Canner teaches plastically deforming a part by stamping and then subjecting the part to austemper heat treatment (abstract, lines 1-13) in order to achieve the desired metallurgical properties of the part.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Backlin/Olson with an austemper heat treat cycle, in light of the teachings of Canner, in order to achieve the desired metallurgical properties of the part.

8. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Backlin in view of Olson as applied to claim 1 above, and further in view of Tsuchihashi et al. (US4605236).

Backlin/Olson teach the invention cited above with the exception of one of the legs being formed longer than the other leg.

Tsuchihashi et al. teach forming one leg of a grommet longer than the other (figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

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invention, to have provided the invention of Backlin/Olson with one of the legs being formed longer than the other leg, in light of the teachings of Tsuchihashi et al., in order to securely hold the grommet in place (col. 3., lines 15-19 of Tsuchihashi et al.).

9. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Backlin in view of Olson as applied to claim 1 above, and further in view of Akita (JP359001873A).

Backlin/Olson teach the invention cited with the exception of coating the grommet.

Akita teaches coating a grommet (purpose, lines 5-8) in order to increase heat resistance.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Backlin/Olson with coating the grommet, in light of the teachings of Akita, in order to increase the heat resistance of the grommet.

10. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Czernik (US3532349) in view of Olson.

Czernik teaches a method of manufacturing a gasket assembly comprising: forming an annular grommet **15** having a generally U-shaped cross-section defining a pair of axially spaced legs having outer axially opposite sealing surfaces spaced a predetermined distance apart when in an underformed state corresponding to an initial thickness of the grommet **15** which is greater than the thickness (figure 2) of the plate **13**, installing the grommet **11** in the opening of the plate **13**, wherein the grommet **15** is fabricated of a "heat-treatable" ferrous-based metal material and is formed to the annular, U-shaped cross-sectional configuration when the grommet material is in a relatively soft, plastically deformable pre-heated condition. It is noted that the

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grommet is compressed elastically under an axial compression load to a reduced thickness corresponding substantially to the thickness of the plate 8 because it is made of metal material.

Czernik teaches the invention cited above with the exception of subjecting the grommet to a heat treatment to impart elasticity and strength properties to the grommet in addition to the plastically deforming of the grommet.

Olson teaches forming a metal grommet including the steps of plastically deforming (figures 5-14a) and then subjecting the plastically deformed grommet to a heat treating step in order to impart increased hardness to the metal and increased memory to the fastening legs.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Czernik with plastically deforming and then subjecting the plastically deformed grommet to a heat treating step, in light of the teachings of Olson, in order to impart increased hardness to the metal and increased memory to the fastening legs.

11. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Czernik in view of Olson as applied to claim 1 above, and further in view of Canner (US6048418).

Czernik /Olson teach the invention cited with the exception of the heat treatment step having an austemper heat treat cycle.

Canner teaches plastically deforming a part by stamping and then subjecting the part to austemper heat treatment (abstract, lines 1-13) in order to achieve the desired metallurgical properties of the part.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Czernik /Olson with an austemper heat treat cycle, in light of the teachings of Canner, in order to achieve the desired metallurgical properties of the part.

12. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Czernik in view of Olson as applied to claim 1 above, and further in view of Tsuchihashi et al. (US4605236).

Czernik /Olson teach the invention cited above with the exception of one of the legs being formed longer than the other leg.

Tsuchihashi et al. teach forming one leg of a grommet longer than the other (figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Czernik/Olson with one of the legs being formed longer than the other leg, in light of the teachings of Tsuchihashi et al., in order to securely hold the grommet in place (col. 3., lines 15-19 of Tsuchihashi et al.).

13. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Czernik in view of Olson as applied to claim 1 above, and further in view of Akita (JP359001873A).

Czernik /Olson teach the invention cited with the exception of coating the grommet.

Akita teaches coating a grommet (purpose, lines 5-8) in order to increase heat resistance.

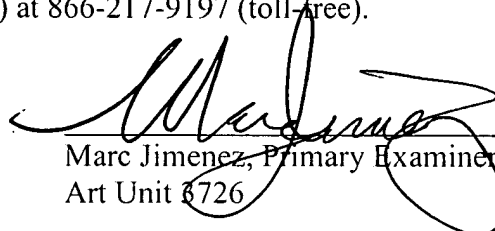
Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Czernik /Olson with coating the grommet, in light of the teachings of Akita, in order to increase the heat resistance of the grommet.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571) 272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Marc Jimenez, Primary Examiner
Art Unit 3726

MJ
3-8-06